

Company Organisation

MAIN WORKS

Falcon Works, P.O. Box 18, Loughborough, Leics. LE11 1HJ.
Telephone: 0509 63131. Telex: 341091 BrulobG. Telegrams: Brush Loughboro. Telex.

SALES OFFICES

South West Area
c/o R.A. Lister & Co. Ltd, P.O. Box 1,
Dursley, Glos. GL11 4HS.
Telephone: Dursley 0453 4141, Ext. 3006.
Telex: 43261.

Manchester
50 Manchester Road,
Chorlton-Cum-Hardy,
Manchester M21 1PS.
Telephone: 061-881 5371.
Telex: 667771.

Reading
10 Castle Street, Reading,
Berkshire RG1 7RD.
Telephone: Reading 0734 582611.
Telex: 847676 Brush Reading.

Darlington
24 Post House Wynd,
Darlington DL3 7LP.
Telephone: Darlington 0325 53567.
Telex: 587187.

Europe
Wassenaarseweg 19,
The Hague, Netherlands.
Telephone: 070 247948
Telex: 32583.

USA
Suite 107, 8582 Katy Freeway,
Houston, Texas 77024, USA.
Telephone: 0101 713 464 8181.
Telex: 910 881 2469 HSPS HOU.

HAWKER SIDDELEY GROUP LTD U.K. COMPANIES

Electrical Engineering

Hawker Siddeley Power Engineering Ltd
Brush Electrical Machines Ltd
Electric Construction (W'ton) Ltd
Brush Switchgear Ltd
Brush Power Equipment Ltd
South Wales Switchgear Ltd
Brush Fusegear Ltd
Hawker Siddeley Power Transformers Ltd
Washington Engineering Ltd
Associated Tapchangers Ltd (59.1%)
Brush Transformers Ltd
South Wales Switchgear Ltd (Transformers)
Yorkshire Electric Transformer Co Ltd
Crompton Parkinson Ltd
Brook Motors Ltd
Opperman Gears Ltd
Crompton Electricars Ltd
Finch Batteries Ltd
Oldham Batteries Ltd
Hawker Siddeley Dynamics Ltd
Westinghouse Brake and Signal Co Ltd
Brook Control Gear Ltd
Brook Crompton Parkinson Motors Ltd
Falcon Short-Circuit Testing Laboratory Ltd
Hawker Siddeley Rail Projects Ltd
Tungstone Batteries Ltd

Metals and General

High Duty Alloys Ltd
Hidutex Engineering Ltd
Aluminium Wire and Cable Co Ltd (33%)
Gloster Saro Ltd
Hawker Siddeley Water Engineering Ltd
Kelvin Construction Co Ltd
Saro Products Ltd
Hawker Siddeley Dynamics Engineering Ltd
S G Brown Ltd
William Aitkenhead Ltd
Dosco Overseas Engineering Ltd
Hawker Siddeley Brackett Ltd
Hollybank Engineering Co Ltd

Diesel Power and Agricultural Equipment

Mirrlees Blackstone Ltd
Petters Ltd
R A Lister and Co Ltd
L Gardner and Sons Ltd
Hawker Siddeley Power Plant Ltd

OVERSEAS INTERESTS

In addition to agents in most countries of the world, Hawker Siddeley Group has wholly or partly owned subsidiaries in the following countries: Canada, Australia, New Zealand, South Africa, Zambia, Bahamas, Mexico, Brazil, Colombia, Argentina, Belgium, France, Denmark, Holland, West Germany, Iran, India, Pakistan, Peninsular Malaysia, Singapore, Sri Lanka, U.S.A., Saudi Arabia.

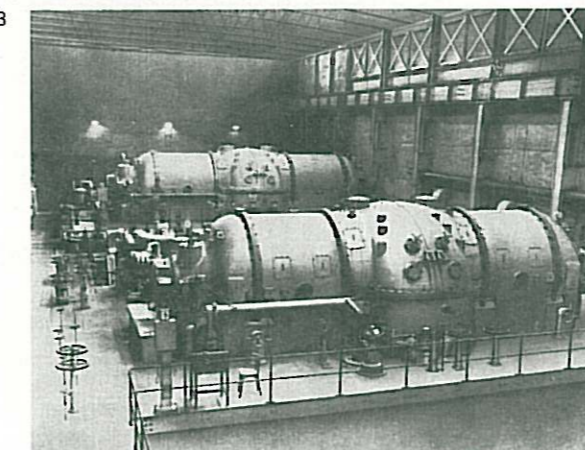
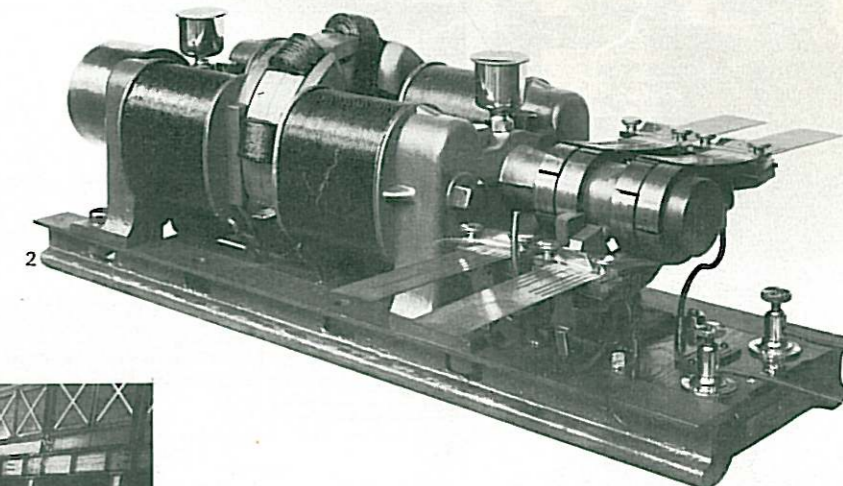
History of The Company

The original company, known as The Brush Electrical Engineering Co. Ltd., was founded on the present site in 1889. Ten years previously an American, C.F. Brush, had set up a company in Lambeth to manufacture and develop generation and lighting equipment. The company prospered on the sale of street lighting schemes and other applications and expansion followed with the purchase of the Loughborough site then occupied by The Falcon Engineering & Car Works.

The production of the Hughes range of trucks and horse drawn trams continued in the early stages, in addition to the Brush electric motors and generators. Gradually electrical power was applied to these vehicles and Brush electrically propelled trams were produced in quantity as well as steam locomotives. Turbines were added to the range in the early part of the century together with buses, cars, and aircraft. During the 1920's and 30's various other electrical engineering companies and diesel engine manufacturers were taken over by Brush. In the 1950's Brush Electrical Engineering Co. Ltd. was producing

motors, generators, diesel electric locomotives, switchgear and transformers. Diesel engine companies such as Mirrlees, National Gas & Oil Engine, and Petters were all part of the Brush Group.

In 1957 the Brush Group was taken over by the Hawker Siddeley Group and the Loughborough site concentrated on the production of rotating machines, diesel electric locomotives, switchgear and transformers. In 1971 the then product divisions of the Company were formed into separate autonomous companies to give to present day organisation of Brush Electrical Machines Ltd., Brush Switchgear Ltd. and Brush Transformers Ltd., the original Brush Electrical Engineering Co. Ltd. remaining responsible only for the site.



BRUSH
TWO-POLE
DYNAMOS

SEND FOR PRICE LISTS TO
BRUSH ELECTRICAL ENGINEERING CO., LIMITED.
49, Queen Victoria Street, LONDON, E.C.

5 **THE BRUSH ELECTRICAL ENGINEERING COMPANY, LIMITED,**
Head Offices: 49, Queen Victoria Street, London, E.C.

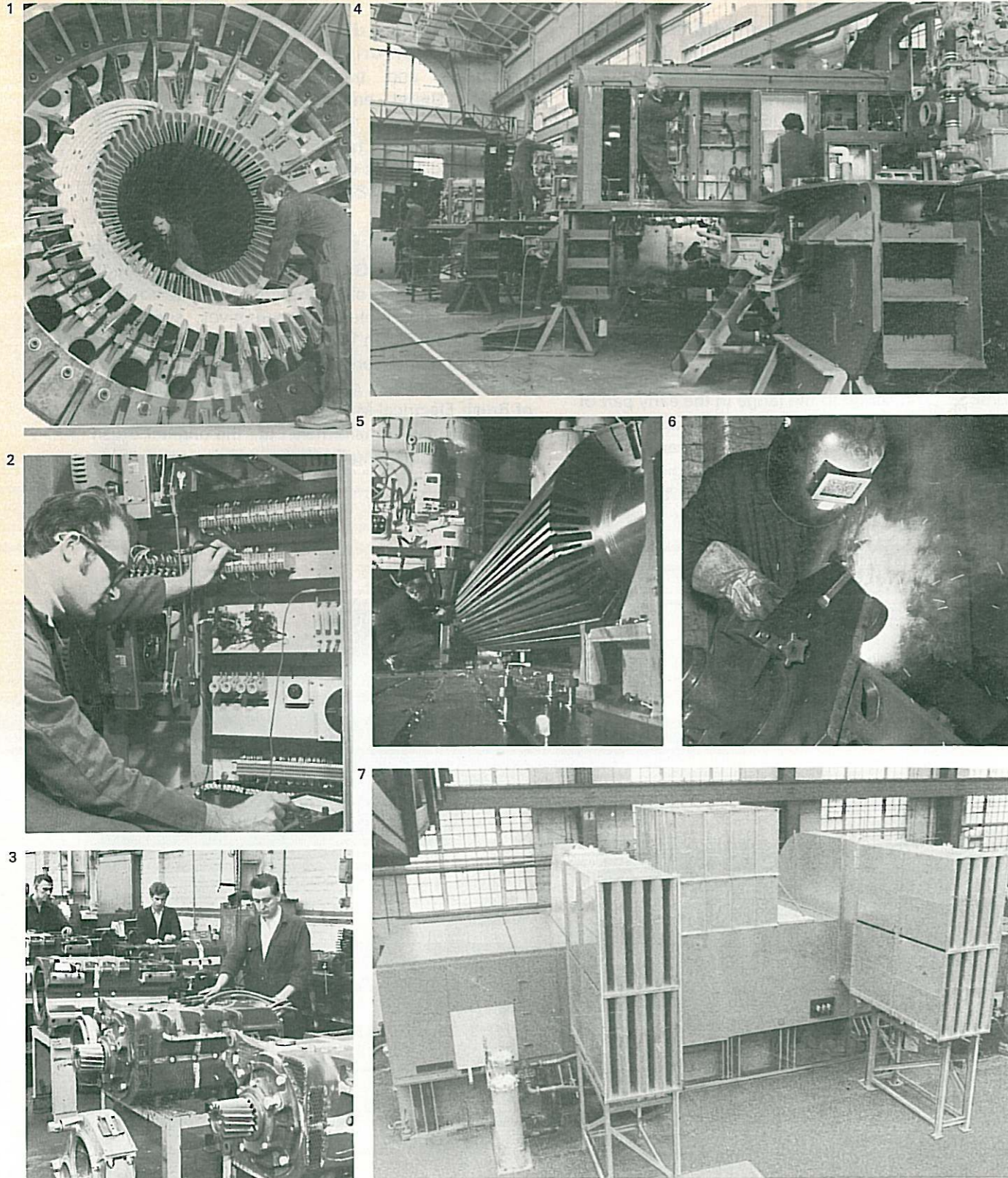
TANK LOCOMOTIVES
FOR CONTRACTORS.
NARROW GAUGE ENGINE
AND
LIGHT RAILWAY ROLLING STOCK

STEAM ENGINES
OF VARIOUS SIZES IN STOCK OR IN PROGRESS.
SPECIFICATIONS, PHOTOGRAPHS AND PRICES ON APPLICATION.

WORKS: FALCON ENGINE & CAR WORKS, LOUGHBOROUGH, LEICESTERSHIRE.

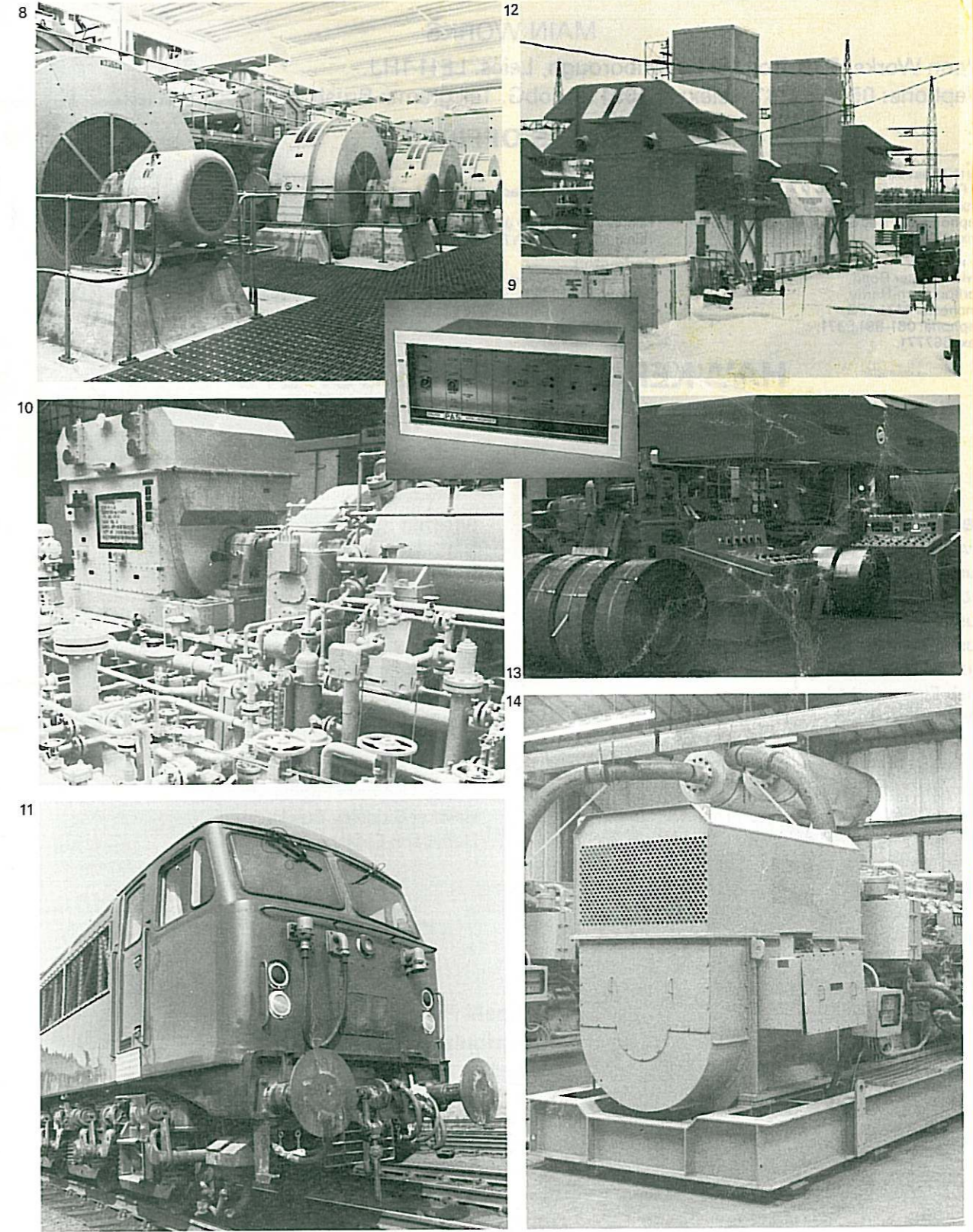
- 1) Charles Francis Brush (1849-1929) Born Cleveland, Ohio.
- 2) Brush dynamo 1878.
- 3) 2 Brush Ljungstrom turbine and generator sets installed at Brighton (taken 1948).
- 4 & 5) Brush press advertisements in "Engineering" 1892.

Manufacture



- 1) Winding the stator of an a.c. generator for turbine drive type DAX.
- 2) Testing a 3 panel cubicle suit supplied for a regenerative cyclic spinning rig. Rating 500hp C.M.R. Speed range 1500 to 15 rev/min. Cyclic sequence can be programmed.
- 3) Traction motor assembly shop.
- 4) 400hp. 0-6-0- diesel electric shunting locomotives under construction for Nigerian Government Railways.
- 5) Milling the slots in the rotor of a large generator for turbine drive.
- 6) Welding a motor stator housing in the Fabrication Shop.
- 7) 70MW. 11. 8kV a.c. generator for turbine drive under test.

Installations



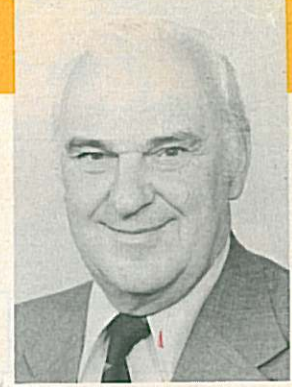
- 8) Brush type 'S' diesel driven a.c. generators installed in a U.K. power station.
- 9) Modular automatic synchronising unit type PAS 510.
- 10) Brush 5968 kW, 1790 rev/min, induction motor coupled to a re-injection compressor ready for installation on a North Sea Oil platform.
- 11) Brush 3500hp diesel electric freight locomotive. Similar locomotives designated class 56 are currently entering service on British Railways.
- 12) Three turbine driven generators rated at 64MW installed in Cadillac, Quebec. Each generator is driven by two Curtiss Wright turbines.
- 13) Cold steel rolling mill equipped with motor drives supplied by the Company's Control Gear Division.
- 14) 625kVA, 415V diesel driven generator type BJSHA supplied for use on a North Sea oil platform.

The Company

Brush Electrical Machines Ltd., employing almost 3,000 people, manufactures electric motors, generators, associated control equipment and traction equipment. The Company is one of the major subsidiaries of Hawker Siddeley Group.



J.M. Durber
Chairman



A.R. Creswick
Managing Director



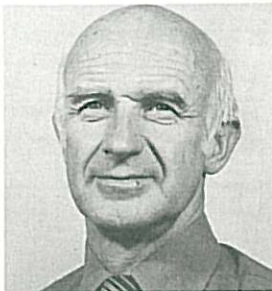
M.B. Page
Sales Director



E.T. McCurley
Export Sales Director



M.F. Radcliffe
Financial Director



B.G. Sephton
Traction Director



R.G. Ayres
Production Director



P.A. McCaig
Personnel Director



J.R.G. Schofield
Control Gear Director

The range of industrial motors extends to 15000kW with specifications to meet all international standards. Flameproof motors are available up to 750kW and d.c. machines up to 2500kW. A.C. generators for either diesel or gas turbine drive are available up to 27MW and 150MW respectively.

The Control Gear Division of the Company manufactures an extensive range of both motor and generator control equipment. Thyristor controlled variable speed drives up to 3400kW are designed and built to customer requirements. Synchronous machine controls employ the latest techniques in equipment for voltage regulation, power factor control, stalling protection, synchronisation and similar functions.

The Traction Division of the Company has an impressive record in the design and manufacture of diesel electric locomotives up to 4000 hp, and also for rapid transit power equipment.



F.J. Robertson
Industrial Sales Manager



D.R. Minkley
Traction Sales Manager



K.M. Dowker
Control Gear Sales Manager



B.A. Gospel
Export Sales Manager



E.M. Dixon
Commercial Manager



D.B. Roe
Service Manager



A.R. Wade
Technical Services Manager



B. Pomfret
Engineering Manager